



Complete Summary

TITLE

End stage renal disease (ESRD): percentage of patient calendar months during the 12 month reporting period in which patients aged 18 years and older with a diagnosis of ESRD receiving hemodialysis have a Kt/V greater than or equal to 1.2 OR patients have a Kt/V less than 1.2 with a documented plan of care for inadequate hemodialysis.

SOURCE(S)

Renal Physicians Association, Physician Consortium for Performance Improvement. End stage renal disease (ESRD) physician performance measurement set. Chicago (IL): American Medical Association; 2007 Mar 9. 27 p. [8 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patient calendar months during the 12 month reporting period in which patients aged 18 years and older with a diagnosis of end stage renal disease (ESRD) receiving hemodialysis have a dialyzer clearance/volume ratio (Kt/V) greater than or equal to 1.2 OR patients have a Kt/V less than 1.2 with a documented plan of care for inadequate hemodialysis.

RATIONALE

Patients receiving hemodialysis must be monitored (by assessing dialyzer clearance/volume [Kt/V]) regularly to ensure that their dialysis dose is sufficient. A patient receiving hemodialysis whose Kt/V level is less than 1.2 is not receiving optimal dialysis. This measure assesses whether the treating physician addressed the low Kt/V level. A plan of care (action defined as checking for adequacy of the arteriovenous (AV) access, increasing the blood flow, increasing the dialyzer size, or increasing the time of dialysis sessions) should be documented by the physician for every time Kt/V is less than 1.2.*

*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Quantifying hemodialysis (HD) is the first step toward assessment of its adequacy. Fortunately, the intermittent rapid decrease in urea concentration during HD allows a relatively easy measurement of the dose. The delivered dose of HD should be measured at regular intervals no less than monthly. (National Kidney Foundation [NKF], 2006)

The minimally adequate dose of HD given 3 times per week to patients with urea clearance (Kr) less than 2 mL/min/1.73 m² should be a single-pool Kt/V (spKt/V) (excluding residual kidney function [RKF]) of 1.2 per dialysis. For treatment times less than 5 hours, an alternative minimum dose is a urea reduction ratio (URR) of 65%. The target dose for HD given 3 times per week with Kr less than 2 mL/min/1.73 m² should be an spKt/V of 1.4 per dialysis not including RKF, or URR of 70%. (NKF, 2006)

PRIMARY CLINICAL COMPONENT

End stage renal disease (ESRD); hemodialysis; dialyzer clearance/volume ration (Kt/V); plan of care

DENOMINATOR DESCRIPTION

Patient calendar months for all patients aged 18 years and older with a diagnosis of end stage renal disease (ESRD) and receiving hemodialysis

NUMERATOR DESCRIPTION

Number of patient calendar months during which patients have a dialyzer clearance/volume ratio (Kt/V) greater than or equal to 1.2 OR have a Kt/V less than 1.2 with a documented plan of care for inadequate hemodialysis

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [NKF-K/DOQI clinical practice guidelines for hemodialysis adequacy: update 2006.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients aged 18 years and older with a diagnosis of end stage renal disease (ESRD) and receiving hemodialysis

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patient calendar months for all patients aged 18 years and older with a diagnosis of end stage renal disease (ESRD) and receiving hemodialysis

Exclusions

None

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS**Inclusions**

Number of patient calendar months during which patients have a dialyzer clearance/volume ratio (Kt/V) greater than or equal to 1.2 OR have a Kt/V less than 1.2 with a documented plan of care for inadequate hemodialysis*

*A documented plan of care may include checking for adequacy of the AV access, increasing the blood flow, increasing the dialyzer size, increasing the time of dialysis sessions, adjusting dialysis prescription, or documenting residual renal function.

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Episode of care

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

Unspecified

Identifying Information**ORIGINAL TITLE**

Measure #5: plan of care for inadequate hemodialysis.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

MEASURE SET NAME

[End Stage Renal Disease Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the Renal Physicians Association and the Physician Consortium for Performance Improvement®

DEVELOPER

Physician Consortium for Performance Improvement®
Renal Physicians Association

FUNDING SOURCE(S)

Unspecified

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FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance
Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2007 Mar

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Renal Physicians Association, Physician Consortium for Performance Improvement. End stage renal disease (ESRD) physician performance measurement set. Chicago (IL): American Medical Association; 2007 Mar 9. 27 p. [8 references]

MEASURE AVAILABILITY

The individual measure, "Measure #5: Plan of Care for Inadequate Hemodialysis," is published in the "End Stage Renal Disease (ESRD) Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on April 28, 2008. The information was verified by the measure developer on June 11, 2008.

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